

## CLAIMS

A complete listing of the claims, including their current status, is provided below.

1-15. (Cancelled)

16. (Previously presented) A method for directing the biodistribution of a drug that binds to a protein target, wherein the drug is directed to an intracellular space upon administration to a mammalian host, said method comprising:

administering to said mammalian host an effective amount of a bifunctional molecule having a molecular weight that does not exceed about 5000 daltons consisting of a drug moiety comprising said drug or an active derivative thereof and a targeting moiety to an intracellular biodistribution modulating protein optionally joined by a linking group, wherein said drug moiety binds to a naturally occurring protein target and said targeting moiety is a peptidyl-prolyl isomerase ligand, and wherein said bifunctional molecule has a modulated biodistribution upon administration to said mammalian host as compared to a free drug control;

to direct said biodistribution of said drug upon administration to said host to an intracellular space as compared to a free drug control.

17. (Previously Presented) The method according to Claim 16, wherein said bifunctional molecule exhibits enhanced efficacy upon administration to said mammalian host as compared to a free drug control.

18. (Previously Presented) The method according to Claim 16, wherein said bifunctional molecule exhibits reduced toxicity upon administration to said mammalian host as compared to a free drug control.

19 - 21. (Cancelled)

22. (Previously Presented) The method according to Claim 16, wherein said bifunctional molecule comprises a linking group.

23. (Previously Presented) The method according to Claim 16, wherein said bifunctional molecule is administered as a pharmaceutical preparation.

24. (Previously Presented) A method for targeting a drug to an intracellular site of a mammalian host, said method comprising:

administering to said mammalian host an effective amount of a bifunctional molecule having a molecular weight that does not exceed about 5000 daltons consisting of a drug moiety and a targeting moiety optionally joined by a linking group, wherein said drug moiety and targeting moiety bind to naturally occurring intracellular proteins and said targeting moiety is a peptidyl-prolyl isomerase ligand, and wherein said bifunctional molecule exhibits a modulated biodistribution upon administration to a mammalian host as compared to a free drug control; to target said drug to an intracellular site of a mammalian host.

25. (Original) The method according to Claim 24, wherein said bifunctional molecule comprises a linking group.

26. (Original) The method according to Claim 24, wherein said bifunctional molecule does not include a linking group.

27-39. (Cancelled)

40. (Previously Presented) The method according to Claim 16, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP or cyclophilin.

41. (Previously Presented) The method according to Claim 16, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP.

42. (Previously Presented) The method according to Claim 41, wherein said ligand for an FKBP is selected from the group consisting of FK506 and rapamycin.

43. (Previously Presented) The method according to Claim 16, wherein said peptidyl-prolyl isomerase ligand is a ligand for a cyclophilin.

44. (Previously Presented) The method according to Claim 43, wherein said ligand for a cyclophilin is a cyclosporin.

45. (Cancelled)

46. (Previously Presented) The method according to Claim 24, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP or cyclophilin.

47. (Previously Presented) The method according to Claim 24, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP.

48. (Previously Presented) The method according to Claim 47, wherein said ligand for an FKBP is selected from the group consisting of FK506 and rapamycin.

49. (Previously Presented) The method according to Claim 24, wherein said peptidyl-prolyl isomerase ligand is a ligand for a cyclophilin.

50. (Previously Presented) The method according to Claim 49, wherein said ligand for a cyclophilin is a cyclosporin.

Claims 51-56. (Cancelled)

57. (Previously Presented) A method for directing the biodistribution of a drug that binds to a protein target, wherein the drug is directed to an intracellular space upon administration to a mammalian host, said method comprising:

administering to said mammalian host an effective amount of a bifunctional molecule having a molecular weight that does not exceed about 5000 daltons consisting of a drug moiety comprising said drug or an active derivative thereof and a peptidyl-prolyl isomerase ligand optionally joined by a linking group, wherein said bifunctional molecule has a modulated biodistribution upon administration to said mammalian host as compared to a free drug control and binds to an endogenous peptidyl-prolyl isomerase to produce a bifunctional molecule/endogenous peptidyl-prolyl isomerase complex that does not bind to calcineurin;

to direct said biodistribution of said drug upon administration to said host to an intracellular space as compared to a free drug control.

58. (Previously Presented) The method according to Claim 57, wherein said bifunctional molecule exhibits enhanced efficacy upon administration to said mammalian host as compared to a free drug control.

59. (Previously Presented) The method according to Claim 57, wherein said bifunctional molecule exhibits reduced toxicity upon administration to said mammalian host as compared to a free drug control.

60. (Previously Presented) The method according to Claim 57, wherein said bifunctional molecule comprises a linking group.

61. (Previously Presented) The method according to Claim 57, wherein said bifunctional molecule is administered as a pharmaceutical preparation.

62. (Previously Presented) The method according to Claim 57, wherein said mammalian host is human.

63. (Previously Presented) The method according to Claim 57, wherein said drug is a small molecule.

64. (Cancelled)

65. (Previously Presented) The method according to Claim 57, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP or cyclophilin.

66. (Previously Presented) The method according to Claim 57, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP.

67. (Previously Presented) The method according to Claim 57, wherein said peptidyl-prolyl isomerase ligand is a ligand for a cyclophilin.

68. (Previously Presented) The method according to Claim 16, wherein said administering results in the formation of an intracellular tripartite complex comprising said naturally occurring protein target, said naturally occurring peptidyl-prolyl isomerase and said bifunctional molecule, and wherein the formation of said intracellular tripartite complex results in said modulated biodistribution of said bifunctional molecule.